

ME:MORANDUM

I():

ALICE FUERST

FROM:

DATE:

NEIL GEITNER

11 MAY 1989

SUBJECT: CHEROKEE COUNTY

EPA Work Assignment 102 7637

CH2M HILL Project Number 68541.PM

I am forwarding to you with this memo the following:

Revised pilot testing work plan as agreed to with the PRP group.

Staffing plan for the upcoming oversight activities now currently scheduled to begin on 22 May 1989.

The following subjects are also covered:

CONCEPTUAL DESIGN

Per our discussion on the telephone today we will include in the conceptual design task with the ne-t work plan revision request for Work Assignment 102-7L37. This task will furnish approximately \$50,000 in conceptual design services for the Agency prior to turning <mark>over the</mark> design to the Army Corps selected contractor. These services will vary depending on the actual remedy selected. There are currently two final options being considered. It is our understanding that, should the current field pilot testing yield unsatisfactory results. The Agency is considering implementing a milling remedy at the site. The following conceptual design tasks are developed for each of these alternatives.

Proposed Milling Remedy Activities

- Conduct further milling process evaluations to determine the final process. This task will involve further laboratory scale metallurgical test work and documentation.
- 2. Prepare final conceptual flow sheets. This output will depend on the results of 1. above.
- Prepare preliminary General & Arrangement (6 & A) drawings. 3.
- 4. Prepare performance specifications for the selected process.



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Backfill Remedy Activities

- Incorporate the results of the field pilot testing into the design concept.
- 2. Conduct validation study of effectiveness model. This model is currently being used to conduct relative comparisons. This model will need to either be validated based on currently available data or have the data needs determined to perform validation.
- 3. Refine the methodologies defined in the OUFS to better define the actual progress of the remedy in each of the currently defined mine waste cones.
- 4. Determine the Statement of Work for the design contractor. The general progression of the design will be defined to assist the Army Corps. The Statement of Work will address the design considerations to be addressed in each of the remedial actions.

Common Conceptual Design Tasks

- 1. Define data needs for final design.
- 2. Develop framework for remedial monitoring network. Note that this framework may be different depending on the remedy selected but will need to be done.

The above scope items are presented for your review and concurrence.

DISCUSSION OF DECEMBER 7, 1988 J. WINSTON PORTER MEMORANDUM ON GUIDANCE ON REMEDIAL ACTIONS FOR CONTAMINATED GROUND WATER AT SUPERFUND SITES

In accord with your direction, we have reviewed this memorandum and have the following comments regarding its potentially applicability to the Galena Subsite GS/SW OU.

1. Based on the current contaminant levels in the shallow ground water system at Cherokee Lounty being above Drinking Water Standards, the five year review will definitely be needed.

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- 2. With the acknowledgement by Region VII that ground water will remain above these levels for all remedial actions currently being considered, the selection of remedy really is not covered by the conditions specified in this document.
- 3. The memorandum suggests the establishment of cleanup levels based on beneficial uses. For the Galena situation this determination is contingent on the treatment of alternate water supply system. If this system is seen as providing a viable alternate drinking water source then the beneficial use for the ground water would seem to be determined by its quality when entering Short and Shoal Creeks and their attendant water quality standards. If the AWS is not to be considered as a complete viable alternate, then drinking water standards would be the beneficial use.
- 4. The memorandum discusses the use of natural attenuation and institutional controls and monitoring. The Galena remedials would seem to fit this category.
- 5. The memorandum suggests that preference be given to remedies that provide the "most rapid restoration that can be achieved practicably." Given that the information given in Appendix D (Basic Ground Water Equations) is thought to be in error, the use of this criterion does not seem to be appropriate especially since the contaminants of interest at the subsite are metals.
- 6. The criteria listed for evaluation of the detailed alternatives are the same that are being used for the OUES supplement. (see Executive Summary p. v)
- 7. The last paragraph of the Executive Summary discusses the selection of a remedy that provides "adequate protection of human health and the environment, to attain ARARS, or to provide grounds for invoking a waiver." I feel that the remedies that we are considering meet the test of this criterion and the cost-effective criterion in the following sentence. (see p. v).

DEFERRED DELIVERIES

- The QAPP needs some minor, mostly typo corrections. I will transmit the revised copy early next week.
- 2. We are changing the Cost Estimate Appendix to delete the alternatives we discussed on Tuesday. Due to these revisions we will transmit the document no later than May 15.